

MARKETING STRATEGIES OF THE HONG KONG  
READY-MIX CONCRETE SUPPLIERS

by

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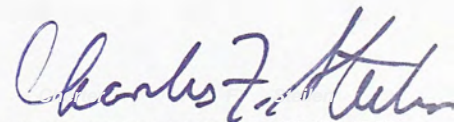
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## ABSTRACT

This research paper was set out to investigate the marketing strategies of the local ready mixed concrete suppliers, to assess the strength and weakness that these suppliers have in marketing this homogeneous product, to identify areas where improvements in their marketing mix would be desirable and to conclude with a hypothesis of the future market situation.

The suppliers were threatened by Redland's aggressive penetrating pricing, but yet unable to implement any counter action. The writer felt that the problems faced by the suppliers would lie in their marketing strategies and marketing mix. A study into the history of the industry since the barrier of entry was broken in early 1980s revealed that the culprit was essentially a general lack of attention to the need for marketing as the suppliers had chosen to operate under a cartel. Although no suppliers had failed to stress the importance of quality and services, many of them did not go beyond quality control and provision of the necessary mix design. The decision to form a cartel rather than emphasizing the marketing of one's product was now proved to be extremely costly in facing Redland's penetrating pricing.

A review of the strategy profiles helped to establish the marketing variables that a supplier should consider when formulating its marketing strategies. How much attention the suppliers had actually given to these marketing variables formed the basis of assessing their relative strength and weakness in the competitive environment. Their competitiveness and the market potential were analyzed as they would greatly influence how these suppliers would compete with each others. Despite the market opportunities offered by site mixes and a buoyant economy, the poor marketing mix of the suppliers had left them with only two uncomfortable choices at the mean time: to start a price war or to live with a reduced market share. The paper went on to predict the future of the market situation.

Research information was gathered from personal interviews with a sample of the major suppliers, literatures and reports and a mini market survey on the ready mixed concrete users.



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## CHAPTER I

### INTRODUCTION

The ready-mix concrete market has undergone drastic changes from essentially a seller's market in the late 1970s to the buyer's market today. The local economy's downturn in 1982 after Hong Kong had experienced a period of phenomenal growth and a general oversupply of both commercial and residential buildings had a profound effect on the market's transformation. Demands for ready mixed concrete dropped abruptly as the Government reduced its capital expenditure and private developers withheld their building projects. The untimely entry of new suppliers in early 1980s further fueled the transformation process, creating chaos when these suppliers were trying hopelessly to deal with their over-capacity in the shrinking market.

#### Breaking the Barrier of Entry

The ready-mix concrete market in 1970s was dominated by two major suppliers: Pioneer Concrete and Ready Mixed Concrete (RMC) with their combined production accounting for over 80 percent of the overall market. The smaller suppliers were largely occupied by their in-house projects -- their ability to compete in the open market was restricted by the economies of scale on the one hand and



the need for an extensive capital outlay for expansion on the other. Neither was there any serious competition between the two major suppliers as the rapidly expanding market was already demanding their full production capacity.

Prices went up rapidly towards the late 1970s as shown in Figure 1. This could mostly be attributable to the continually growing demands but at the same time, Cheung Kong's acquisition of Hutchison Whampoa might also have its impact on the ready-mix concrete market -- at the time of the acquisition, Cheung Kong was already holding a 50 percent equity stake in Pioneer through its subsidiary Green Island whilst Hutchison Whampoa was a 50 percent owner of Ready Mixed Concrete. The concentrated control of the market would have caused the concrete price to rise more rapidly than it should if the market force alone was at work.

The increasing profitability invited entries to the market. Demands for additional suppliers were also derived from contractors and developers who had been frustrated by the price instability and the need to have to wait in line for the concrete supplies. Ken On, K Wah and Construction Material (CML) were starting to compete in the open market to capitalize on the perceived opportunities.



### Jockeying for Position

Given their relationship, the two major suppliers in the seller's market perhaps did not find it necessary to market their product. This same attitude, however, was strictly adopted by the new competitors with little regards for the changes that were happening in the marketplace. They were expecting no more than selling their production capacity. When the declining demand was no longer able to support a profitable production volume, they reacted hastily and the market became a battleground for a fierce price war. The concrete price plunged from a unit price of \$340 to \$260(1) in a matter of months in 1984 as recorded by Ken On. For a few of the suppliers, the tactics appeared to be 'attack at any price'. There was no consideration of the market trend, the competitor's strength and the long term implications of securing a substantial supply contract at a low price. It turned out that no single supplier in the market was strong enough to wipe out its competitors and predicable as it was, every supplier ended up on the losing side with the contractors and developers reaping most of the benefits.

There were mergers and acquisitions in the concrete/aggregates industry and a redistribution of market shares during and after the price war. Both K Wah

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1 Concrete price quoted is for grade 30/20 concrete which is the most commonly used grade in building and civil works. This was the lowest spot price. The market price dropped only slightly to \$325.



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and Ken On gained some ground at the expenses of Pioneer and RMC. CML was acquired by K Wah while Anderson Asia Concrete (AAC) became a part of Hutchison Whampoa. It took a knock-down drawn-out battle to make the ready-mix suppliers realize that heavy price cutting was not the answer to develop their business.

The re-formation of the Concrete Producers' Association (CPA) brought back the price stability in late 1985 as these suppliers were opting for cooperation rather than competition in its truest sense. The function of CPA (2) is to apportion potential business to its members based on a mutually agreed market share for each of them. Competition exists mainly between CPA members and non-CPA members.

#### Hard Times Ahead

All the major suppliers in 1985 were CPA members and the smaller non-CPA members were outclassed and outnumbered. Despite the fact that CPA members had to live with their pre-determined market shares which imposed a certain limitation on their growth, they were fairly satisfied with the role that CPA was performing as it ensured them high profitability with minimum competition. Growth was still achievable through expansion of the total

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2 During the writer's subsequent interviews with the major suppliers, only K Wah had denied the role of the Concrete Producers' Association.



market as the local economy rapidly rebounded from its recession.

The entry of a new supplier, Redland, in mid 1986 represented a significant change of the competitive situation. As a powerful non-CPA member, Redland has successfully adopted a policy of penetration pricing and quickly seized a substantial share of the market in just eight months since its establishment. Members of CPA are alarmed but have so far not responded with a similar price cut. They are hesitant to start another price war while being seemingly at a loss to know how to counteract Redland's aggressiveness.

This research paper will start by first looking into the strategy profiles of the ready-mix concrete business to establish the important variables that these suppliers should consider when formulating their marketing strategies. These variables will form the basis of evaluating the relative strength and weakness of the suppliers in terms of their ability to market their product in the face of rising competition.

Competition will not be confined between CPA and non-CPA members if Redland's expansion is to continue any further. Erosion of CPA's market share may result in disintegration of the association when the agreed shares can no longer guarantee its members a desirable production volume, nor a profitable margin. The temptation of another price war is always present as the suppliers appear to



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remain committed to selling only their production capacity. The competitiveness of the each individual supplier and CPA as a whole will decidedly influence the course of the future market development. Their competitiveness, however, depends on their abilities to formulate a suitable marketing strategy and to integrate their marketing mix to capture opportunities in the environment. An assessment of the competitive environment will identify the problems faced by these suppliers. These together with an analysis of the market potential will determine what strategic alternatives are available to them and enables a hypothesis of the overall market situation in the future.

Site mixes offer the greatest market potential for these suppliers to expand their business. Factors influencing the contractor's decision to use site mixes rather than ready mixes will be gathered in a questionnaire survey. A supplier who gives attention to these factors are likely to excell in its fight for production volume.

There are environmental threats posed by China's open door policy which tend to shake up the stability enjoyed by the CPA members by inviting competition not only in the ready mixed concrete market itself, but also in its closely related quarries production business. Changes in the cement supplies are also likely to emerge following the recent Green Island and China Cement merger. They can

become yet another threat to some suppliers. But, there are opportunities. Opportunities offered by the site mixes and the continual growth of the local economy. A potential price increase in the cement supply and increasingly higher quality requirements for concrete all seem to point to a greater demand for ready mixes. The objective of the paper is to study how the major suppliers, given their strength and weakness, have formulated their marketing strategies to minimize the adverse effects of the environment threats whilst capitalizing on the perceived opportunities. Their action will change the market outlook. The fate of CPA, which depends very much on the strategies adopted by these suppliers, can have wide implications in the industry.



## CHAPTER II

### METHODOLOGY

Research information was gathered through personal interviews with the major suppliers, reviews of reports and literatures and a questionnaire to potential customers.

#### Interview with Suppliers

Personal interviews were conducted with a sample of the nine (3) established major suppliers consisting RMC, Pioneer, K Wah, Ken On and Redland which collectively took up about 85 percent of the total ready-mix concrete market. Failure to obtain a response from Glorious or Wai Siu for an interview so far had made it impossible to add another non-CPA member in the sample given the time constraint of this research.

The purposes of the interviews were to identify the marketing objectives of these suppliers and the marketing mix that they had developed to achieve these stated objectives. These would form the basis of an appraisal of the overall market situation. The stage of development of

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3 Construction Materials, a subsidiary of K Wah is not considered as a separate supplier.

a marketing management system and the marketing perspective of these suppliers would indicate their flexibility in facing the growing competitive pressure ahead. These coupled with their existing marketing mix would enable evaluation of their relative competitiveness in the future market and prediction of changes in the market.

### Literatures and Reports

The market trend and the overall distribution of potential business were obtained from Government statistics and Development Programmes from the Housing Authority, the Territory Development Department and the Building Ordinance Office.

Demands for ready-mix concrete will be higher in certain areas of the territory due to more rapid development. By virtue of their distribution networks, some suppliers will have greater strategic advantages in securing the potential business. Competition is likely to be more intense in certain areas than others due either to insufficient demands or concentration of competing batching plants. This information is useful in the analysis of the competitive environment and in predicting the future market development.

Reports from the Concrete Producers' Association contained much valuable information concerning the existing distribution of market shares and production



volumes of the suppliers. The predetermined market shares will be a source of conflicts and the survival of CPA appears to be hinged upon the its resolution as well as competition from non-CPA members.

### Survey of the Potential Customers

Information regarding the need of the marketplace was gathered from a mini survey where a questionnaire was sent to 50 contractors (4) with an aim to understand the factors that would influence their buying decisions. Thirty-one replies were received.

These contractors are potential customers for the competing ready-mix concrete suppliers but at the same time they are also potential competitors from a wider perspective. They can choose to produce concrete on their own by setting up a batching plant on site instead of buying from the ready-mix concrete suppliers. They play an important role in the competition as the volume of site mixes normally represents about 15 percent of the total demands. Moreover, it is possible for these site plants to supply to other contracts in their vicinity and this will certainly reduce the market opportunities further for the ready-mix concrete suppliers.

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4 The questionnaire was sent to civil contractors who would be the major decision makers in the buying process. A more comprehensive survey should include developers, consultant engineers and the Government who may exert a certain amount of influences by virtue of the need to obtain their prior approval for the use of site mixes or ready mixes or a particular supplier.

The multiple roles of a contractor both as a potential customer and a potential competitor will definitely influence not only the supplier's formulation of its marketing mix but also the competitive environment.

## AN OVERVIEW OF THE MARKETING PROFILE

Residential and commercial building projects account for 70 percent of total construction demand. The rest goes to public infrastructure projects such as roads, bridges, and water supply systems. As a typical example, the demand for roads is not derived from the private sector but is derived from the public sector and the Government's commitment to its capital work program. Although the concrete road is a major cost component in infrastructure projects, its contribution to the overall project cost is small. This is due to the very high unit price of concrete. The demand for concrete is very sensitive to the economic and political environment -- the interest rate, the exchange rate, and the cost of cement. The concrete price itself is very sensitive to the cost of cement.

For the individual supplier in this industry, growth is not possible by forcing down the overall market price in the hope of achieving total market coverage. Sales potential must be gained at the competitive price level.



## CHAPTER III

### AN OVERVIEW OF THE MARKETING PROFILES

Residential and commercial building projects account for 70 percent of total ready-mix concrete demands. The rest goes to civil engineering works such as road construction and other improvements to the infrastructure. As a typical industrial product, the demands are not derived from the buying organizations themselves but are derived from the home buyers and the Government's commitment in its capital work programme. Although the concrete cost itself is normally a major cost component in construction, its significance in the overall project expenditure is diminished by the very high land price. This contributes to its inelastic demand characteristic. The demands are very sensitive to the economic and political environments -- the movement of interest rates has more to do with the concrete demand than the concrete price itself.

For the individual supplier in this industry, growth is not possible by forcing down the overall market price in the hope of achieving total market expansion. Sales potential must be gained at the competitor's expenses if a

supplier is to reduce its vulnerability to the uncontrollable environmental factors.

### The Product

Concrete is basically a mixture of water, aggregates and cement. Product differential is not great enough to effect much differential advantage to any company in the industry. However, as a technical product, its sales usually go with other technical services such as technical proposals and submissions and preparation of trial mixes in order to suit the specific requirements of each individual construction project. All suppliers have in-house laboratories to carry out these tasks.

Product liability appears to be a major concern of the interviewees. In fact, they seemed to have placed a great deal of emphasis on their technical competence in producing good quality concrete. Obviously, the need to replace sub-standard concrete can be most damaging to the firm's image and costly. RMC was the only suppliers in the interviews who considered itself to have successfully instilled this idea of competing on quality rather than prices to its sales team. This seems to be in line with the survey statistics in Table 1 when the respondents were specifically asked to rate the concrete quality of these suppliers based either on their own experience or their perception. Despite the similarity in product



characteristics, Pioneer and RMC were consistently regarded as the best quality people in the industry.

The perception of quality becomes especially important in large civil or housing estate projects where a hefty sum of liquidated damages is imposed upon the contractor for delay in completion. It is highly probable that a contractor will be willing to pay a certain premium for the better quality product he perceives in order to reduce his risk of progress slippage resulting from the need to replace sub-standard concrete work.

#### The Cost of Production

Table 2 shows a typical breakdown of the concrete production cost based on the prevailing market rates for the raw materials. The production cost, which is 90 percent made up of the prices for aggregates and cement, is seen to be very susceptible to price fluctuation of these two primary raw materials. With respect to the overhead costs, the major element is the amount of rent that a supplier has to paid for using of the batching site.

The aggregates and cement supplies are very much controlled by members of the Contract Quarries' Association (CQA) and the Cement Manufacturers' Association (CMA) respectively. Both of these associations perform similar roles as CPA.

Until recently, members of CQA were commanding about 90 percent of the aggregates market and by virtue of their



strength, the price for aggregates had remained relatively stable at high level. However, changes in this market are already underway. With China's open door policy, a number of contract quarries there have already begun their supplies to the local market. More are expected to come on stream in the near future. Supplies from across the border have already captured 30 percent of the market and the expansion is likely to continue. Figure 2 shows the volume of local aggregates production from 1976 to 1985.

Aggregates are easily obtainable nowadays at about \$50 a ton as compared to CQA's \$65 listed price. The effect is most beneficial to those contractors who prefer site mixes and the smaller ready-mix concrete suppliers. Unlike their powerful counterparts, these smaller buyers do not have their own quarries, nor their orders large enough to secure the very limited supplies from China in the past.

The change in the aggregates market may, in the first place, encourage more site mixes if the ready-mix concrete suppliers do not reduce their prices accordingly to reflect the declining cost of aggregates. Secondly, as for those suppliers such as Ken On, K Wah (including CML), AAC and Pioneer who have local contract quarries and are members of CQA, they have another problem to face. The previously high market price for aggregates ensured that their competitors could not obtain this raw material at



prices comparable to their production cost (5). It was a definite competitive advantage over the rest of the suppliers. With the influx of supplies from China, the situation is beginning to change. The lower cost of production in China has essentially wiped out this benefit associated with a local quarry. In fact, if the production cost of aggregates is to become any lower, these suppliers will have to decide whether to obtain the aggregates in the open market or to carry the burden of continuing local production at above the market price.

At the meantime, Redland is already operating two contract quarries in China, K Wah is developing one which is expected to come into production this August. CML was established on the strength of its quarry just north of the border. Its inland location placed certain limit on its growth potential as land transportation is several times higher than transportation by barges. Ken On, RMC and Pioneer had indicated in the interview that they had no intention so far to start quarrying operation in China.

With respect to the cement supplies, Green Island and China Cement are the only two local producers. There are other overseas suppliers from Japan, Taiwan, Macau and China but the major restraint for these overseas suppliers to expand their business in Hong Kong is the need for

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5 It would either be their quarry production or concrete production that was reaping a substantial profit depending on the basis of transfer prices. CPA and CQA offered double protection for those who were members of both associations.



special storage areas close to the waterfront where they can unload the cement from barges and for the large investment in transportation facilities. Nonetheless, the ready-mix concrete suppliers have no difficulties in ensuring a constant cement supply at competitive price due to the abundant capacity of Green Island and China Cement. Local production of cement has remained relatively stable over the years as shown in Figure 2 but the supply situation is likely to change following the recent merger of Green Island and China Cement. Green Island may be tempted to limit the cement production as a means to boost up prices. In fact, there is a distinct possibility for Cheung Kong to close down the outdated Green Island plant at Hungghum to make room for its property development projects whilst using solely the more modern plant previously owned by China Cement at Tap Shek Kok for the cement production. This would undoubtedly raise the cement price. Pioneer and particularly, RMC are unlikely to be affected by this due to their ties with Cheung Kong. Ken On is the only other supplier who has a direct interest in a cement producer (6). The rest may find themselves in a competitive disadvantage if they cannot securing cement supplies at comparable prices from overseas suppliers. As for those contractors who have been producing their

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6 Ken On has a 50% share in Far East Cement - a supplier based in Japan who provides 100% of Ken On cement requirement.



concrete on site, the higher cement price, especially for small orders, will raise the break-even volume making them more difficult to justify their site production.

### The Specification

The specification can be considered as the rule of the whole buying process and the suppliers have to comply with by all means. Specification, nonetheless, does change as technology advances and as additional knowledge of the material's behaviour is gained through its applications and through researches. The addition of chemicals to concrete to increase its strength and durability and the increasingly widespread use of pulverized-fuel ash as a partial replacement for the costly cement are indicative of the continuing technological advancement.

As for the majority of works, there are little complication in the mix designs or in the production process itself. The primary role of a ready-mix concrete laboratory is perhaps more concerned with quality control rather than research and development works. The ability to produce a highly sophisticated product therefore becomes important only in image building.

### The Market

The existing ready-mix concrete market is estimated to be around 700,000 cubic meters (cu m) in average per month. All CPA members have an agreed share of the market



as shown in Table 3. Total concrete demands varies in proportion with the gross amount of construction work performed. As shown in Figure 3, the market has significantly rebounded since it reached its nadir in 1984.

Ready-mix concrete suppliers have to conduct their business in a highly geographical market. This is partly due to the concrete's characteristic to become hardened about an hour after mixing. The time limits the distance a truck can travel and therefore the area a batching plant may serve. At the same time, given the stability in aggregates and cement prices in the past, the cartage cost has traditionally been one of the most important variable cost in the concrete production.

The cost of land usage is another cost determinant. It varies between wide limits from as low as \$10,000 a month to as much as \$250,000. A piece of Crown Land at Kowloon Bay has been reportedly bid by K Wah at an annual rate of three million. If used for concrete production alone, the rent represents a overhead charge of about \$7.5 per meters of concrete for a production close to capacity (7).

#### The Competition

CPA members comprises Pioneer, RMC, Ken On, K Wah, CML and AAC. Non-CPA members are made up of Redland, Wai

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7 assuming two loading points with a maximum production capacity of 33,000 meters a month.



Siu, Glorious and Quon Hing. Members of CPA currently accounted for 70 percent of the total concrete supplies whilst the remaining is taken up by non-CPA members and site mixes. Table 4 shows the estimated volume of production by each suppliers.

Given the role performed by CPA, its members do not in theory compete with each others. In practice, overtrading or undertrading does occur among CPA members. Table 3 indicates that Pioneer, CML and AAC are currently trading below their agreed shares in CPA.

The number of batching plants as well as their locations greatly influence the sales potential. Figure 4 shows the batching plant locations of all the existing suppliers gathered from the interviews.

Competition in the ready-mix concrete market exists not only among the suppliers themselves. Contractors in larger contracts may choose to produce concrete by setting up their own batching plant on site. As mentioned above, these site mixes have normally taken up about 15 percent (8) of the total market. The greatest advantage of site mixes is probably to minimize transportation cost and to ascertain timely supplies to suit the contractor's work progress. However, the need for a large capital outlay and the problem of quality control may have prevented more frequent uses of site mixes.

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8 This has been reduced to about 10 percent following Redland's entry.



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Contractors were asked in the survey to consider how likely their decision to use site mixes or ready mixes will be influenced by a number of factors. These factors will be important in choosing the target market and in formulating the marketing mix.

### The Customer

Although the majority of customers for ready-mix concrete is contractors in the building and civil construction industry, there are other parties in the sales cycle who may influence the contractors' buying decision and the suppliers have to ensure that the needs of these people are satisfied as well as those of the contractors. A contractor's work is supervised by engineers, architects or consultants acting as representatives for the client. These people basically want the work to be completed in accordance with the specification. The contractor is usually required to obtain approval from these supervising authorities before he can use concrete from a specific supplier. There are standards to be met and the client representatives have to satisfy themselves that the approved supplier is capable of maintaining a high standard of quality control. There were instances in which a ready-mix concrete supplier was completely banned from jobs supervised by a certain consultant engineer when the concrete was consistently produced below the consultant's specified requirements.



The customer's profile is further complicated by the fact that a contractor's buying decision may also be affected by the client or its concrete placing sub-contractor. Concrete suppliers such as Pioneer, Ready-mix Concrete (RMC) and Ken On are known to have ties with Cheung Kong, Hutchinson and Shui On respectively. These powerful developers are likely to put pressure on their contractors to buy from specific suppliers based on an entirely different set of criteria and needs.

The suppliers' company profile especially with respect to their link with developers, contractors and raw material producers should be considered.

#### Factors to Consider

In formulating the marketing strategies, a supplier must try to differentiate its product or else he must compete solely on the basis of pricing. Obviously, quality and services are important. But, quality is intangible. It is what the customer perceives that counts. A good record of successful concrete cube tests is essential but not sufficient to foster the quality image. When problems arise, the ability of the supplier to discuss and resolve them in a professional manner with the consultant engineers or the clients is equally important in promoting its product. In fact, no contractors or consultant engineers will expect the ready mixed concrete supply would never fail the tests. From the writer's experience as a construction manager, a technically incompetent



representative from the supplier could perhaps do more harm to the product's image than a bad cube test. A bad cube may indicate only a minor slippage in the production process but an incompetent staff points to a bigger problem about the firm's production standard.

Likewise, services are not just providing the mix designs and delivering the concrete to site. Prompt deliveries, accurate measurements of quantity delivered and cooperation of the mixer-truck drivers in unloading the concrete can all count towards good services.

There are a number of services the ready mixed concrete suppliers could provide to the contractors in connection with their sales. Things like formwork and falsework designs, concrete cubes or spacers for steel fixing and chemicals for curing the concrete after placing are associated with 99 percent of all concreting work. It is understandable that some contractors, especially the smaller ones, would welcome some assistance from their concrete suppliers for their formwork and falsework designs as it is impractical and costly for them to employ a team of design engineers to carry the designs if they only have one or two contracts on hand. At the same time, their site engineers are likely to be occupied by site administrative and supervisory duties and will have little time for undertaking the design works. The provision of miscellaneous materials that are required for concreting is helpful as the contractors do not have to look for these materials separately from other suppliers. Even the



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provision of sub-contractors for concreting, erection of formwork or steel fixing are possible areas into which the concrete suppliers may consider expanding their business. The emphasis is paying attention to the customers' needs which will arise through his use of ready mixes. Selling the concrete is only part of the game.

The geographical nature of supplying ready mixed concrete requires sufficient number of plants to be situated at strategic locations of the territory in order to ensure prompt deliveries. A supplier who is unable to supply to the whole of the territory not only loses a considerable amount of potential business but may also find it more difficult to establish a lasting relationship with its contractor customers. As indicated by the survey statistics, only a few of the contractors had purchased their ready mixes from more than two suppliers. The contractors appeared to favour purchases from a supplier whom they had prior experience. However, the contractors' business has no geographical limitation. A contractor may be forced to change supplier if the existing one is unable to supply to its sites in certain areas of the territory. That change can be permanent.

It is inevitable that competition will sometime be based entirely on price. There are cases in which quality is much less important like in some small contracts or the contractor has grossly underbid its concrete rate. A supplier's cost of production can decidedly influence his ability to compete. This in turn depends on how well he



has integrated his business. The price of cement and aggregates supplies and the rent of the batching sites are the major cost determinants and a supplier must pay attention to these when formulating his marketing strategies. Indeed, the current pricing policy of quantity discounts may possibly be reversed to reflect the importance of price on small contracts and the increasing emphasis on quality in large contracts.

Besides focusing one's attention on the contractors, a supplier must also cater for the needs of the developers, the consultant engineers, the architects and the Government who are likely to have a say on the contractor's use of ready mix concrete. By inviting these people to visit a modern laboratory owned by the supplier or by sending competent representatives to attend the many seminars held by various associations of professional engineers can increase the firm's visibility and enhance the quality and competence images.

The influence of these indirect customers can become substantial if, for example, they begin to make more abundant use of steel rather than concrete in their structures. An increasing number of newly erected buildings in recent years are built with structural steel and finished with glass panels, a continuing trend in this direction can deprive the suppliers of considerable demands for ready mixes. The suppliers must collectively play a more active role in establishing a relationship



with these people with a view to encourage more frequent uses of concrete. CPA can be an useful channel in this respect.

A supplier must understand the strength and weakness of its own firm as well as its competitors and the environmental threats and opportunities before it can hope to grow and prosper. Competition will become tougher not only because of Redland but also given the changes that are happening in the environment. How and on what basis these suppliers intend to compete can have significant effects on the market's outlook.

## CHAPTER IV

### ASSESSING THE COMPETITIVE ENVIRONMENT

The state of competition is mainly shaped by the business strength of the individual suppliers in terms of their market shares, distribution effectiveness and perceived product quality and services. The intensity of rivalry, which was previously dampened by the existence of CPA and a total market expansion, will continue to increase depending on the effectiveness of Redland's penetrating strategy and the rate of market growth. Changes in the supply of raw materials have their impact on the competitive environment.

#### Redland, a Formidable Contender?

Redland is a fully owned subsidiary of China Resources which is often regarded as the flagship of China's investment firms in the local business market. It's entry to the ready-mix concrete in June 1986 did not arouse much attention initially. The lack of response, especially from the powerful CPA members, has allowed Redland to quickly expand from a single plant at Lam Tei, Tuen Mun to seven plants todate with a production capacity



totalling 5,500 meters a day. Redland's plant locations as shown in Figure 4 are perhaps among the best in the industry rivalling the market leader, Pioneer, in terms of market coverage -- a feeling shared by both RMC and Ken On in the interviews.

Redland's sales volume was 65,000 meters in March, representing over 9 percent market share and a growth rate of 50 percent a month since January. Its plan is to capture 35 percent market share at an expected monthly demand of 800,000 meters by the end of 1987. This represents a production output of 288,000 meters - an increase of 215,000 meters over its existing production.

Redland's existing distribution network will not be expanded further. Mr M Wall (9) considered its latest addition of a plant at Sheung Wan would mark the end of Phase I of his firm's development programme. Phase II will involve with the addition of smaller plants on individual sites. It will begin after the firm's cement production plant across the border comes into operation early next year.

As Table 4 shows, Redland's sales in Hong Kong Island is only 14 percent of the company's total monthly production and takes up a relatively small share of the potential market in this area. The Sheung Wan plant should enhance its strength and reduces its dependence on the Kowloon area where competition is most intense. Redland

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9 Mr M Wall is the Managing Director of Redland.



will be actively seeking new jobs in the Island and it is aggressively quoting to jobs currently being supplied by other suppliers with an aim to generate a higher volume of business in this area.

### The Marketing Mix

Redland's strength lies in its ability to secure comparatively inexpensive aggregates supplies and a network of well placed batching plants. Its high growth rate is attributable to an effective penetrating pricing policy -- perhaps being made more effective than what it should be by the lack of counter actions from its competitors.

### The product

The image problem was perhaps the hardest to overcome during the start-up period of the firm as acknowledged by Mr Wall himself. Still very much a young company in the industry, it is certainly going to take some time for Redland to establish confidence in the majority of contractors and consultant engineers.

From the customer's survey (Table 1), Redland's overall image ranks at the sixth behinds all the CPA members.

To improve its product image, Redland has employed Ken Francis - a long time friend of Mr Wall himself and the man responsible for leading EMC's technical support team for over 10 years - as its Technical Consultant. There is a concentrated effort for prompt deliveries and



to maintain a clean fleet of trucks, both of which has been rather successful with an above average rating in the survey.

### The pricing

Redland's penetrating pricing has been very effective in fueling its growth in the past nine months. It was quoting \$280 to its potential customers whilst CPA was still listing its price at \$330 a meter. Perhaps, the CPA members had overestimated the product differentiation in terms of quality and technical competence.

The CPA members' insensitivity could be accounted for by the lack of an adequate monitoring system for the market. Redland's penetrating pricing was not at first threatening because its growth in the first six months would have been mainly generated from the would-be site mixes. The customer survey indicated that a low price of ready-mix concrete would tend to discourage site mixes whilst a high price would encourage them. Price is an important factor in the customer's decision to buy or to produce the concrete himself. There was little doubt that many contractors, who would have erected their own batching plants on site, had opted for Redland's concrete. The total market expansion also would have concealed the effects of Redland's penetration to a certain extent. The existing members' production volumes were not affected and therefore there was no corresponding responses.



### The distribution

The development of Redland's distribution network is in line with his marketing objectives and echoes the expected demands induced by its penetrating pricing.

In fact, in order to ensure delivery reliability and to cope with the occasional peak demands, Redland had successfully negotiated for Glorious's supports in certain areas. For instance, Redland first got into the East Kowloon area by way of the Glorious's plant at Kowloon Bay. This was most important in the early stage before Redland's distribution network was fully developed.

Half of Redland's sales are generated in North New Territories (NTN) and West New Territories (NTW) - these are very logical places for a new entrant to establish its foothold. Unlike the Island and Kowloon areas in which almost every supplier in the industry has a significant portion of its business and in which competition is likely to be keenest with the concentration of all the major suppliers, Redland only has to fight with one major supplier in either NTN or NTW. NTN is dominated by K Wah/CML and no other suppliers have over 3 percent of their production in this area. Similarly in NTW, the market is largely AAC's who has over 60 percent of its production in this area and control over 40 percent of the market before Redland's entry.



### The promotion

Redland is currently targeting its promotional effort to contractors and developers with Chinese (10) capital. Developers like Sino Land and China Resources itself and large contractors such as T S Wong and China Construction Engineering are backing Redland with considerable orders.

The target market is an obvious choice given Redland's background. However, Redland's sales force appear to lack some necessary supports to integrate them with the overall marketing objectives. Sales management in the areas of training and sales forecasting and a monitoring system for the efficiency and effectiveness of the sales force is relatively weak or completely absent. The joining of RMC's Marketing Manager, Mr Howard Chan (11) may be considered as a determined effort to improve its sales management and should reinforce Redland competitiveness in the industry.

### CPA Members - Compete. How to Compete?

Pioneer is the market leader commanding a quarter of the total market. It is followed by RMC (17 percent), Ken On (14 percent), K Wah/CML (13 percent) and AAC (7 percent). With their 76 percent total market share, they are quite capable, at least in theory, of erecting a

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10 referring to Mainland China

11 Mr Howard Chan joined Redland about a month's after the writer's interview with him at RMC.



strong barrier to fence off new entrants. There was legal and political considerations but Redland did not encounter any retaliatory action for its cut-throat prices primarily because it was not considered a threat in the first place. Even later when the threat was recognized, the CPA members had failed to exercise a concerted effort, or indeed any effort at all, to limit its expansion.

CPA allocates potential business to each of its member based on the agreed shares. Its listed price serves to safeguard against adverse price cuttings among its members. It is the lowest price a CPA member may quote to a potential customer if the job is not allocated to him. Only the particular member who has been assigned the job may submit quotation to this customer at any prices it may deem necessary to compete with the non-CPA members. In essence, Redland is competing with one CPA member at a time when it is negotiating for potential business. This greatly reduces the competitive pressure on Redland.

When a potential job came up in either the NTW or NTN areas, CPA would tend to allocate it respectively to AAC and K Wah/CML to allow these two suppliers to take full advantages of their savings in production costs in these areas. This tactic turned out to be most beneficial to Redland when it chose to enter through targeting its start-up business in these two areas. Both AAC and K Wah/CML did not have significant advantage over a new entrant like Redland in terms of product image, technical



competence and services as indicated in the customer's survey. Their product simply could not justify the price differential CPA wished to maintain. Redland's cut-price policy could have been made less effective at its infant stage if it was to face either Pioneer or RMC, who were the only two suppliers in the industry that had a distinctive advantage in the perceived product quality. The fact that Redland did not have to face constant competition from these two suppliers mitigates its own image problem.

#### Their Strength and Weakness

Both Pioneer and RMC appear to be quite contented with their existing production volumes. They are not interested in expanding further unless there are clear indication of growing demands from the market itself. As the two leading suppliers in the industry, they have a well developed distribution network, a high product image and strong ties with a number of large contractors and developers. Pioneer's established clients include Hong Kong Land, Paliburg, and Gammon. RMC's close clients consist of Leighton, Hsin Cheong and a number of Japanese contractors, most notably Kumagai, Nishimatsu and Maeda. About 20 percent of RMC's production output is accounted for by the in-house jobs coming from Hutchison and other Cheung Kong related companies.



Pioneer obtains its aggregates and cement supplies entirely from Pioneer Quarry at Anderson Road and Green Island respectively (12). Pioneer's major problem, paradoxical as it may seem, is with its two parent companies. Pioneer is required to obtain the two basic raw materials from them at relatively high prices. The profitability of Pioneer Concrete is taken a back seat whilst both of its parent companies are making substantial gains through the transfer price. In 1984, Pioneer incurred several millions losses which, apart from the effects of the market slump and the price war, could be attributable to its failure to obtain the necessary supports from Pioneer Quarry for a reduction in the price of aggregates. Pioneer Quarry was reportedly still making considerable profit that year. RMC's raw material supplies are more flexible although Green Island and Anderson Asia Stones are its major suppliers for cement and aggregates respectively. Even before the recent Green Island/China Cement merger, it has been placing substantial orders to China Cement. A large portion of its aggregates supply also comes from Wai Kee and other importers of aggregates from China.

Ken On has 30 percent of its production accounted for by Shui On Property and Shui On Construction. It has its

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12 Pioneer Quarry, 100 percent owned by an Australian interest and Green Island, 100 percent owned by Cheong Kong are joint owners of Pioneer Concrete.



own Shui On Quarry as well as a joint venture with Lamma Rock for its aggregates supply. It is also a co-owner of Far East Cement. Its market objectives is to become the second largest ready-mix supplier, overtaking RMC in terms of total production outputs and to become the top supplier in terms of product quality.

To achieve these objectives, Ken On has a fully developed marketing management system which is perhaps the best in the industry. Its computerized database for marketing information was set up in 1985 and represents the only one in the industry so far. An independent marketing department is responsible for planning and acquiring the necessary information for updating the database including a complete analysis of its competitors' level of sales, market share and profitability. The system also contains statistics about the environment factors and a complete profile of its potential customers.

The marketing concept was most in evidence in the interview with Ken On. Others appeared to be vague and uncertain even in the first step of market segmentation. Ken On tailors its marketing effort to a group of contractors who have been identified with a strong tendency to use ready-mix concrete based on their buying history, financial strength, the size of a particular job and the quality requirements likely to be expected from the supervising authority. The information enables Ken On to base its sales decisions on the realities of the



marketplace rather than on hunch and intuition as most other suppliers appear to do. Its distribution objective is directing at marine works and other waterfront projects. Its marketing department has just completed a field survey for suitable seafront locations for erecting additional batching plants.

K Wah/CML is the forth largest supplier in CPA and in the market as a whole in terms of market shares. K Wah, who had its primary business in quarrying, started its concrete production in 1981 about the same time as its then unrelated counterpart CML. K Wah Concrete was a product of K Wah Stones' forward integration and served to reduce its parent company's dependability on other heavy users of aggregates products. CML was acquired by K Wah Stones in the midst of the price war in 1985.

K Wah's ready-mix business has since grown to become a major part of the company, generating about two third of the Group's total sales revenue. The price war had enlarged K Wah's market share from about 7 percent in 1984 to today's 13 percent. It was a growth rate of approximately 55 percent if taking the CML acquisition into consideration and 42 percent (13) if discounting the acquisition. The growth was achieved not without substantial costs. The price war eroded K Wah's profit by

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13 CML alone accounted for about 3 percent of the total market. The estimate is based on this and a total demand of 7 million meters a year.



more than 60 percent as indicated in K Wah prospectus for its shares offer in January this year.

The strength of K Wah/CML lies mostly in its parent company's expertise in quarry production and a determination for further growth. K Wah is the only CFA member who has had investments in quarries across the border. Its On Ling Ding quarry will be coming into operation later this year ensuring K Wah a constant supply of inexpensive aggregates. But as far as marketing the ready-mix concrete is concerned, K Wah appears to lack a definite direction and an appropriate system to gather information necessary for formulation of suitable strategies. It relies largely on its sales team to provide feedback on the competitive environment and remains very much a production oriented supplier. However, it seems that K Wah is making an attempt to implement a marketing management system. It is increasing its number of staff in its marketing department and has begun a process of computerization. However, it took Ken On two years to set up its database for marketing intelligence.

There appears a certain uneasiness in K Wah/CML about the role of CPA. The uneasiness may translate into withdrawal from the association. Mr Fletcher (14) mentioned about the responsibility of the company to its shareholders and that K Wah would not limit its growth by decisions from other companies. He was the only

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14 General Manager of K Wah Stones Holdings



interviewee who had denied what CPA was meant to do in the ready-mix concrete industry. According to Mr Fletcher, CPA serves only as a meeting place for the suppliers where potential business can be exchanged to suit each individual member's plant location for minimum production costs. 'The purpose of the association is to help a member to secure a job that is close to its batching plant. Members can exchange jobs in order to keep the transportation cost to a minimum.' The same statement was essentially repeated by K Wah's Marketing Manager, Mr D Cheung. The statement indicates, if anything, a complete failure to appreciate what in fact K Wah is trying to sell - it is the low price rather than the product itself. From a marketing perspective, the same 'product' cannot be obtained from two different suppliers despite its homogeneous physical characteristic.

#### The Distribution

As shown in Figure 4, except for Pioneer and RMC who have a distribution network covering the whole of the territory, other CPA members relies only on specific areas to generate a significant portion of the firm's business. K Wah/CML is strongest in NTN. Its Woo Shek Koo quarry just north of the border at Man Kam Road makes it the only supplier to have a relatively cheap aggregates source in this area. The cost advantage enabled K Wah/CML to control over 60 percent of the market before Redland's entry. AAC's strength in NTW is similarly derived from its quarry



in Lam Tei, Tuen Mun. Ken On's production is more evenly dispersed among Island, Kowloon and Shatin areas. Its Lamma Island quarry requires Ken On to establish its batching plants at sites with sea frontage in order to obtain maximum cost savings in the supply of aggregates by barges.

Pioneer and RMC have decentralized its batching plants in that each of their plants may compete with each others for the allocated job and arrange its own delivery schedule after the job is secured. The distribution of Ken On and K Wah/CML is arranged by a centralized headquarter which decides the daily production and delivery schedules for each of their plant based primarily on the plant capacity and the size of the orders.

Pioneer and RMC had the highest rating in their product quality in terms of prompt deliveries which could be attributable to their decentralized distribution system. The competition among plants in the same area requires the plant managers to pay more attention to the services they provide to the customers. Plants in a centralized setting lacks the motivation that competition may bring. In fact, given the relatively limited number of plants Ken On or K Wah/CML has in each area, a centralized system would appear unnecessary. The advantage of a centralized distribution system is to allow more efficient use of trucks as they can be allocated to various plants on a daily basis depending on the volume of orders. It



should effect some cost savings if properly implemented but the need to provide a high quality product is equally important. The cost and benefit associated with a particular distribution system has to be assessed carefully.

### The Product

The highly perceived product quality of Pioneer and RMC may well be credited to their ability to supply to large contracts, a reputable technical team and their market positions in the industry.

RMC is able to maintain a slight price differential of about 1.5 percent to capitalize on the firm's product quality. It is those highly visible jobs like the Chartered Bank Building project recently secured by Pioneer and the supply of ready-mix to the second cross harbour tunnel by RMC that will have their impacts on the customer's perspective of the firm's product. Ken On comes closest to challenge Pioneer and RMC in its product image. Its association with Shui On Construction had given it the opportunities to supply to a number better known building projects in the Wan Chai area. Both K Wah/CML and AAC are apparently in need of this type of projects to enhance their product's perceived quality.

As regards the provision of services, only Ken On had indicated in the interview that it was currently looking into the feasibility of providing concreting sub-contractors to its ready mixes buyers in conjunction with



the sales. Given the strength of its sister company, Shui On Construction, there is no doubt that Ken On is capable of doing so. The possibility is there as 35 percent of the contractors surveyed had indicated their willingness to consider using a sub-contractor provided by their ready mixed suppliers. Other suppliers were all stressing on the need to have a high quality product and good services but fell short of pinpointing what were necessary to achieve these objectives.

### The Promotion

A definite promotional strategy was identified in both the interviews with Ken On and RMC. Ken On went so far as to ask its top management to set aside certain amount of the company's time for cultivating a relationship with the consulting engineers and client developers who were regarded to have considerable influence on a contractor's buying decision. RMC is essentially going along the same direction but the task is with its technical staff.

The need to integrate the promotional strategy and the pricing strategy was spelled out by RMC. The large scale project such as its supply to the second cross harbour tunnel was allowed not only a quantity discount but also a promotional discount to take into consideration its beneficial effect on promoting the firm's product image.



## The Pricing

Besides the obvious quantity discounts and a price variation based on the geographical location of the customers, the pricing policy of CPA members is made very much unimaginative by CPA's listed price. The reduced number of bidding rivals, especially the stronger ones in the industry, has largely eliminated the need for a sophisticated bidding model for assessing the expected competition.

Another problem with CPA is its job allocation system. A CPA member will not be penalized for losing an allocated job to its non-CPA counterparts. Because it is the number of successful bids rather than the number of allocations that will count towards the agreed shares, a CPA member will continually be allocated jobs as long as its production on hand is below the agreed limit. That means a member does not have to bid sufficiently low to compete unless it is really desperate.

The fact that CPA only revised its listed price of grade 30/20 concrete to \$310 eight months after Redland was quoting \$280 to its customers indicated the inflexibility of CPA. Nothing was done to offset the apparent price differential and the inflexibility has cost the CPA members a substantial portion of potential business.

An important factor affecting the price of the concrete supplies is the credit policy adopted by the



firm. A 30 days credit is commonly available to the customers. All CPA members appear to be quite rigid about the credit period unless they are forced by their major buyers to lengthen it. Pioneer, EMC and K Wah had all suffered from a considerable amount of bad debts incurred during the price war. Maybe they have become a little too cautious as a result. In fact, with proper credit control, the credit period may be an effective tool to foster a relationship with the major buyers and to attract potential business from reputable firms.

### Marketing Strategies of the Ready Mixes

#### Concrete Suppliers

The emphasis is predominantly pricing. But even pricing itself is based on nothing more than routine calculations of quantity discounts, production cost and cartage costs. For some suppliers, the cost factor has even overshadowed the importance of a complete distribution network in establishing customer relationship and promoting the firm's product image. They limit their batching plants to areas where they can obtain comparatively cheaper raw materials and hesitate to venture into other areas where they may lose the production cost advantage.

All suppliers underscored the importance of product differentiation in terms of better quality and services but most of them failed to go beyond a string of



successful cube tests for the quality they seek and the provision of a mix design as their customer services. As a result, the product is restored to its homogenous nature, and with a homogenous product, price becomes the only marketing variable that the suppliers can manipulate.

The marketing problems that were inherent in the ready mixed supply industry did not manifest themselves until Redland had established itself as a formidable competitor and with no apparent intention to cohere with the CPA members. Redland's cut-throat price was very effective because price was the only basis of the competition. As Redland has put its need for profitability behind the need to generate foreign currencies for the Chinese Government, unless the suppliers are able to switch the basis of the competition, there is little hope that they can successfully defend their business, let alone achieving growth in the present competitive environment.

However, CPA members do have their strength. The distribution network and product quality of Pioneer and RMC, the marketing management system of Ken On and the quarrying expertise of K Wah/CML are competitive advantages that the others lack. It is the lack of a fully integrated marketing strategy that has hampered their ability to compete. Customers are always cost-conscious but the suppliers cannot hope to succeed by targeting all their effort only to those who pay attention to price



alone. The pricing strategy can be more flexible and there are obviously more to quality and services than many of them tend to consider. The suppliers should be paying more attention to needs of their customers which may arise out of the concreting work, their own professional outlook and their visibility as a competent producer of ready mixes.

A fight is still possible in a price war but it is necessary for the CPA members to exercise a concerted effort to contain Redland's expansion. Pioneer and RMC's strength in Kowloon and Hong Kong Island, K Wah/CML in NTN, Ken On in Shatin and AAC in NTW will be effective as a whole to limit the pace of Redland's growth. The cost advantage of these suppliers in their respective home bases will make them more comfortable in retaliating Redland's cut-throat price with an equally deep price cut. Only when Redland receives the message that its pricing strategy is not going to achieve its market share objective will it stop and starts looking for another way of marketing its product. However, the current situation appears that wherever Redland goes in, the major supplier there will immediately retreat and let other CPA members in the area to fight. The very passive defense can be costly to every one of them at the end.



## CHAPTER V

### A LOOK AHEAD

Changes in the structure of competition seems inevitable with Redland's offensive strategy which continues to erode the market shares of the CPA members. Essentially only two strategic alternatives are left with the CPA members as Redland has already firmly established itself in the industry. They can persuade Redland to join the association in the hope of maintaining profitability through a higher market price despite the reduced market shares. If this is unsuccessful, the fate of CPA is in doubt. The association loses its purpose for existence as members will be tempted to trade above their agreed shares to make up for the losses in profit margin at a lower price and a reduction in actual production output as a result of a shrinking market share of CPA as a whole. The suppliers will have to prepare themselves for a fair competition. Neither of them a comfortable choice for the CPA members.

Several factors do come into play as the market is charting its course for the future.



### The Market Potential

From statistics issued by the Building Ordinance Office and the Housing Authority concerning the number of buildings with 'consent to commence work', the sales potential of in various areas of the territory is estimated as follows:

Areas	Potential Sales*
Hong Kong Island	35 percent
Kowloon	17
Tsuen Wan	18
Fanling/Sheung Shui	7
Shatin	8
Tuen Mun/Yuen Long	15

\* relative sales potential based on gross value of construction expected.

The total concrete demand, including site mixes, is estimated at 10 million meters in the next 12 months based on the number and value of jobs that will become available from both the private and public sectors. Longer term forecast can be based on the Government's development programmes and the amount of expenditure committed in the above areas. Table 5 indicates that among the various new towns developments, Tuen Mun receives the greatest commitment from the Government whilst the amount of works in Yuen Long should grow most significantly after 1988.



The amount of works available in Hong Kong Island and Kowloon will be very much limited by the availability of land in the long run. Property developers are more inclined to acquire new lands for their building projects instead of going through the time-consuming and uncertain process of redeveloping old building sites by negotiating with a number of small land owners. Strategic growth areas include the Green Island Reclamation at the western tip of Hong Kong Island, Central-Wanchai Reclamation, Hung Hom Bay Reclamation and West Kowloon Reclamation.

Given the development opportunities, the Government's commitment in further developing the various new towns in the territory and a growing economy, the market potential for ready-mix concrete is favourable and should provide ample opportunities for a stable long-term growth.

However, in the immediate future, the land factor alone will eliminate any possibility of achieving an overall market growth that is capable of absorbing the additional 215,000 meters production planned by Redland without other suppliers giving up a significant production volume of their own.

#### The Site Mixes

The largest untapped market in the ready-mix concrete supply is the site mixes. Of the 10 million total annual demand, 10 to 15 percent will be taken up by contractors who choose to erect their own production facilities



instead of purchasing from the ready-mix suppliers. This concrete production, if freed from the site batching plants, will considerably increase the demand for ready-mix concrete. Among the factors affecting the contractor's decision, the price of ready-mix concrete, the duration and the size of the job are often quoted as being most influential.

The cost of site mixes is estimated in Table 6. At the CPA listed price of \$310, any jobs having a concrete demand over 10,000 meters will tend to opt for mixing on site, leaving the choice to a relatively large number of jobs. At Redland's \$280 price level, the break-even volume becomes 30,000 meters. In theory, Redland's cut-price should have attracted a higher volume of business as the number of jobs requiring over 30,000 meters in 18 months is modest. But Redland estimated only 50 percent of its current sales were coming from contractors who would have used site mixes. This would mean that only 30 percent of the potential site mixes had been attracted by Redland's cut-price. The rest remained committed to producing their own concrete. It becomes obvious that there ought to be some intangible factors carrying a good deal of weight in the contractor's decision in addition to the price.

The intangible factors give the suppliers a lot of room for improving its sales.



### Making a Choice

Pioneer and BMC would most likely want to keep CPA running by inviting Redland to join. CPA's agreed shares are calculated on the basis of a member's amount of works on hand when it joins the association. By virtue of their existing production volumes, the amount they will have to give up and trade for Redland's cooperation might not affect them as much as it would for either Ken On or K Wah/CML. Ken On and K Wah/CML may be less certain about Redland's membership.

CPA, essentially operating as a cartel, is treading a dangerous path in the local free trade environment. Whether its members can get away unharmed from an investigation into its operation remains very much an uncertainty. The pressure on a recently listed public company like K Wah/CML is obvious, the uneasiness they felt about the role of CPA was real. Even without the Redland factor, there is a strong likelihood that CPA will break up with the leaving of either Ken On or K Wah/CML or both.

In the writer's opinion, it would seem contradictory if Ken On, after building up such a strong marketing department, is not preparing itself for the eventual disbandment of CPA. Ken On and K Wah/CML are the two most heavily overtraded CPA members (Table 3). With an additional quarry coming into operation, K Wah cannot be satisfied with its 11.84 percent share in CPA.



But the dissolution of CPA may come a little too soon for K Wah/CML. Lacking a complete distribution network, it certainly will be unable to capture any jobs in the high potential NTW market. Growth potential in its home base NTN is small. Even that, it is under heavy attack by Redland at Fanling. K Wah has attempted in recent CPA meetings to secure jobs in Kowloon rather than NTN to temporarily get away from Redland's attack. The incomplete marketing management system may also hamper its ability to compete in a free market. Similarly, Ken On does not have a single plant in Tuen Mun or Yuen Long and has a high concentration of its business in the congested Hong Kong Island, Kowloon and Shatin areas. Its advantage over K Wah is a strong sister construction company which provides a reasonable quantity of in-house jobs and reduces the open market competitive pressure. Its marketing department would apparently count as an asset.

The possibility of Redland accepting the invitation, however, is slim. The problem lies with the company's goal and the commitment it has already made in developing its business in Hong Kong. Redland was set up by China Resources with a primary goal of generating foreign currencies for the Chinese Government. To do that profitability becomes secondary. In fact, Redland does not have to be profitable at all. Secondly, Redland seems to have placed much emphasis on the need to fully develop its two Chinese quarries and the cement manufactory that will



soon be coming into production next year. Its target production volume of 280,000 meters a month is solely based on the need of its quarries rather than that of the concrete market. Under this circumstance, there is little left for bargaining. Even under the most optimistic sales forecast, the total market expansion will bring in only an additional 110,000 meters a month which, if given entirely to Redland, will boost its production to 175,000 meters but still 105,000 meters short of its target. If the deficit amount is made up by reducing the production volume of existing CPA members, each will have to give Redland 21,000 meters and a loss of \$672,000 in contribution. The monthly production for Ken On or K Wah/CML will be reduced to 64,000 meters. To maintain the current profitability, the market price will have to increase by \$10.50 to \$320.00 to make up for the losses in contribution from a smaller production output. The \$10 increase is not by any standard substantial and should in practice be absorbed by the market. However, this is an idealistic assumption. Except perhaps for Pioneer who may live with a smaller production whilst still capable of consuming a significant output from its parent Pioneer Quarry, other CPA members will find it difficult to accept the reduced production. K Wah/CML, for instance, will have no alternative but to increase its concrete production or its entire chain of business will be affected.



Strictly from a profitability point of view, the joining of Redland will do more good than harm to the CPA members. The practicality is limited by their need to look after their quarry business which has grown to rely heavily on the concrete production -- a business that ironically fails to receive the necessary marketing supports and becomes vulnerable to adverse competitive pressure. Lacking a differentiated product and an integrated marketing mix, price becomes the only weapon the majority of suppliers has at their disposal in the competition. Redland, in this case, also has nothing but the same only weapon. The difference, its ammunition is abundant and much cheaper.

#### The Market's Future

It will be an inevitable price war and substantially a repeat of history of 1984-85. After the suppliers' show of strength, CPA will be reformed but this time with Redland as the leading member.

The CPA members have no reason to blame Redland in forcing them into making this uncomfortable choice. The previous price war should have taught them the needs for marketing their product. Instead, many were led to believe that the formation of CPA had resolved their marketing problems. As revealed in this research, the temptation of short-term profitability did overshadow the need for a



healthy and sustained long-term growth. CPA simply could not provide the answer and never will.

The ready mixed supply industry is destined to another price war because it is just too late for the CPA members to formulate and implement a counter-attack on Redland. Time is needed to promote product differentiation; to analyze the site mix potential and to target one's marketing effort to these site mixers; to establish a competitive distribution network; to train and recruit a competent team of technical sales staff; to promote a relationship with the clients, the developers, the contractors and the consultant engineers; to establish a marketing management system; to assess what and how to introduce additional services and to set up a credit control system for more flexibility in credit terms, trade and quantity discounts. These all take time but time is running out for the CPA members. Maybe, after this price war, they can finally start seriously considering how to market their product.

Redland does not want the entire concrete market. Although profitability may not be its primary concern, it would seem naive to believe that it will conduct its business continually at a loss, or at zero profit margin. It wants a substantial portion of the market share to fulfill its needs for foreign currencies but at the same time, it evidently does not want to eliminate the competition altogether. Competition is necessary for a



stable and prosperous economy which the Chinese Government has always stressed. It is on this basis that the writer predict the re-formation of CPA after Redland has got what it needs. Perhaps, it is the 35 percent market share mentioned in the interview.

The re-formation of CPA is likely to hinder the growth of a marketing concept in the industry. Users of ready mixes may have to wait before they can enjoy the benefits that a truly competitive ready mix supply industry may bring. However, they are certain to enjoy a short-term cost saving as a result from the price war.

The marketing concept may never come given the current position of the major suppliers. Pioneer has two seemingly dissonant parent companies who care more about the transfer price than Pioneer's own profitability and growth. The Green Island/China Cement merger will probably tighten the local cement supply and Pioneer's usefulness in absorbing Green Island's output is lessened.

Furthermore, the merger and the increasing aggregates supply from China reduce the bargaining power of Pioneer's other parent, Pioneer Quarry. Pioneer will live with a smaller production rather than aggressively seeking to maintain its market leader position. From Cheung Kong's point of view, Pioneer is perhaps strategically unimportant except to ascertain a reliable supply of ready mixes for its development projects. Cheung Kong's original plan might well be controlling the ready mix industry back



in late 1970s. With the barrier of entry broken, the option to divest Pioneer is open.

As for RMC and its sister company AAC, their determination to defend their market shares is also unclear. There is little need for Hutchison to separately maintain two concrete supply subsidiaries in the first place. AAC was very much a dying company when it was acquired by Hutchison. The purpose of the acquisition was seen by many as an inexpensive way of expanding RMC's business -- AAC's market share on the CPA book gave RMC the only opportunity to expand significantly under the agreed share restriction. Hutchison may consider combining RMC and AAC if the price war begins to hurt. The move will render a reduction of RMC/AAC's combined market share more comfortable. Secondly, RMC/AAC are again not going to be of great strategic significance to Hutchison. The leaving of its Marketing Manager, Howard Chan and Technical Director, Ken Francis may be indicative of the strategies that RMC may take in defending its market position.

Ken On and K Wah/CML are the two CPA members who cannot afford any reduction in their production output. They are likely to take more positive action in formulating and implementing a suitable marketing strategy to counteract Redland's pressure. K Wah/CML does not have the time to do now as it is the weakest among the CPA members in terms of marketing. The ready mix production is vital, at least in the foreseeable future, to K Wah's



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survival. As in the last price war, it will probably fight the hardest with equally deep price cut. It could emerge stronger in market position though necessarily with an associated heavy erosion of short-term profitability. Meanwhile, K Wa/CML will try to get as many jobs as possible whilst profit margin is still good. Large contracts which may extend over a two-year period but secured at the current price will tend to offset some of the damaging effect on profitability when the war is on. Its marketing success depends on its ability to grow out of its home bases in NTN and Kowloon West.

The pressure is less on Ken On with the backup of Shui On Construction and Shui On Property. This coupled with a comparatively small but identifiable target market on seafront contracts, a well equipped marketing team and the foresight to look into providing additional services to its concrete sales, Ken On can well be considered the leader in marketing in the industry. Only the lack of product differentiation forces Ken On to follow the price trend. Ken On will not give up its market share without a fight and it seems to be in the best position to do so. Ken On is the likely candidate who will lead the ready-mix suppliers into an era of marketing.

The opportunities are here with the site mixes and the buoyant economy. The re-formation of CPA will give each supplier time to re-think and come up with a marketing strategy that will be suited to its own strength



and compatible with its marketing objectives. Price is only one of the many important factors in the marketing mix and over-reliance on this one factor to compete can be very imprudent.



TABLE 1  
SUMMARY OF SURVEY STATISTICS

=====

1. Ranking of Suppliers in terms of their product's quality.

Best: Ready Mixed Concrete  
Pioneer  
Ken On  
K Wah/CML  
Anderson Asia Concrete  
Redland  
Glorious  
Quon Hing  
Poorest: Wai Siu

2. The percentage of contractors who have purchased from

4 or more suppliers	13%
3 suppliers	45%
2 suppliers	36%
1 suppliers	7%
none	0%

3. Product and services.

A = Anderson Asia  
G = Glorious  
K = Ken On  
M = Ready Mixed Concrete  
P = Pioneer  
Q = Quon Hing  
R = Redland  
S = Wai Siu  
W = K Wah/CML

Suppliers	A	G	K	M	P	Q	R	S	W
i. Prompt Delivery	7	7	6	8	9	6	7	7	7
ii. Accurate Batching Quantity	8	8	8	8	8	7	8	8	8
iii. Co-operation of Truck Drivers	5	7	7	8	7	5	5	6	5



TABLE 1 (CONT)  
SUMMARY OF SURVEY STATISTICS

3. Product and Services

Suppliers	A	G	K	M	P	Q	R	S	W
iv. Cleanliness of Trucks	5	4	7	8	7	5	6	4	5
v. Flexibility in Meeting Contractor's Work Schedule	6	6	5	6	7	8	7	5	6
vi. Ability to Resolve Technical Problems	5	5	7	9	8	5	5	4	5
vii. Overall Rating	6	6	7	8	8	6	6	5	6
Total Points	43	43	47	54	54	42	44	39	42

4. Situation when Ready Mixes are used.  
(Figures shown are actual number of replies.)

	Most Likely	Likely	Unsure	No
quality requirements are high	15	14	0	2
price is below site mixes	20	9	2	0
price is compatible with site mixes	2	12	12	7
price is above site mixes	0	5	18	8
RE or client indicates his preference	9	19	3	0
Sub-contractor indicates his preference	3	7	15	6



TABLE 1 (CONT)  
SUMMARY OF SURVEY STATISTICS

4. Situation when ready mixes are used.

	Most Likely	Likely	Unsure	No
quantity requirement is				
below 500 cu m	20	10	1	0
between 500 and 3000	10	15	6	0
between 3000 and 6000	4	12	12	3
between 6000 and 9000	4	8	2	17
above 9000	1	3	1	26
duration of contract is				
less than 6 months	29	2	0	0
bet 6 and 12 months	27	4	0	0
bet 12 and 24 months	10	11	5	5
above 24 months	1	2	2	26
location of work is				
remote	0	2	7	22
liquidated damages of				
contract is high	5	6	18	2
working in a building				
project	10	14	7	0
working in a civil				
project	4	6	11	0
your workload on hand				
is high	6	17	8	0
site working area				
is limited	29	2	0	0



TABLE 1 (CONT)  
SUMMARY OF SURVEY STATISTICS

	Most Likely	Likely	Unsure	No
5. Use of additional services provided with the concrete sales.				
formwork and falsework design	5	5	17	4
carrying out concreting work	5	4	12	10
carrying out other related works such as steel fixing and erection of formwork	4	4	11	12
supplying material related to concreting such as curing compounds, form ties, steel spacers, form oils, etc.	11	12	5	3
6. Will you using ready mixes more frequently given the above additional services.	9	14	8	0

Source: Results of Customer Survey.



TABLE 2  
COST BREAKDOWN OF READY MIXED CONCRETE

=====			
Market Price		310.0	(100%)
Cost of Goods Sold:			
Cement @ \$415/ton	139.0		
Aggregates @ \$60/ton	108.0		
Additives	<u>3.5</u>		
		250.5	(80.8%)
Gross Margin . . . . .		59.5	(19.2%)
Variable Overhead:			
Cartage	20.0		
Power and Miscellaneous	<u>7.5</u>		
		27.5	(8.9%)
Contribution Margin . . . . .		32.0	(10.3%)
Fixed Overhead:			
Site Establishment	@ \$50,000 to \$150,000/month		
Insurance and Misc	@ \$10,000/month		
Breakeven Monthly Production:			
Minimum = 60,000/32		= 1875 cu m	
Maximum = 160,000/32		= 5000 cu m	

- 
- Notes: 1. Cost Breakdown not including allocated Head Office Overhead which depends on the firm's accounting practice.
2. Cost of Raw Materials is based on prevailing market rate. Quantity discounts and the method of transfer pricing are not considered.
3. The amount of rent for the batching plant site accounts for the wide variation of site establishment charge.



TABLE 3  
CPA MEMBERS' AGREED SHARES

Member	CPA Agreed Shares	Actual Shares (1/ 87)	Actual Shares (8/86 - 1/87)
Pioneer	34.11	33.32 (-0.79)	31.38 (-2.73)
RMC	21.67	22.15 (+0.48)	23.17 (+1.50)
Ken On	16.95	18.53 (+1.58)	19.14 (+2.19)
K Wah	11.84	15.04 (+3.20)	14.35 (+2.51)
CML	2.63	1.73 (-0.90)	2.28 (-0.35)
AAC	12.80	9.24 (-3.56)	9.69 (-3.11)

Sources: RMC and Ken On



TABLE 4  
PRODUCTION VOLUME OF SUPPLIERS

	HKI	KLN	NTN	NTW	SHATIN	SHATIN
Pioneer	59,100	65,200	5,700	24,300	9,000	9,000
a	35.5%	25.0%	9.4%	26.1%	14.5%	14.5%
b	36.0%	40.0%	4.0%	15.0%	6.0%	6.0%
RMC	30,100	55,000	9,200	8,100	6,500	6,500
a	18.1%	21.1%	15.1%	8.7%	10.5%	10.5%
b	28.0%	51.0%	8.0%	7.0%	6.0%	6.0%
Ken On	31,400	26,800	5,900	8,900	17,800	17,800
a	18.9%	10.3%	9.7%	9.6%	28.7%	28.7%
b	35.0%	30.0%	7.0%	10.0%	20.0%	20.0%
K Wah/ CML	7,900	44,100	25,500	-	-	4,700
a	4.7%	16.9%	41.9%	-	-	7.6%
b	10.0%	54.0%	31.0%	-	-	6.0%
AAC	4,600	4,400	1,600	26,700	8,000	8,000
a	2.8%	1.7%	2.6%	28.7%	12.9%	12.9%
b	10.0%	10.0%	4.0%	59.0%	18.0%	18.0%
Redland	9,000	22,000	13,000	21,000	-	-
a	5.4%	8.4%	21.3%	22.6%	-	-
b	14.0%	34.0%	20.0%	32.0%	-	-
Glorious	1,300	19,000	-	-	12,000	12,000
a	0.8%	7.3%	-	-	19.4%	19.4%
b	4.0%	59.0%	-	-	37.0%	37.0%
Quon Hing	15,000	13,000	-	4,100	-	-
a	9.0%	5.0%	-	4.4%	-	-
b	47.0%	41.0%	-	13.0%	-	-
Wai Siu	8,000	11,000	-	-	4,000	4,000
a	4.8%	4.2%	-	-	6.5%	6.5%
b	35.0%	48.0%	-	-	13.0%	13.0%

Sources: RMC, Redland, Pioneer and Ken On supplied own data. Others from Ken On Marketing Dept.

TABLE 5  
PUBLIC EXPENDITURE ON NEW  
TOWN DEVELOPMENTS

Year	86-87	87-88	88-89	89-90	90-91
Area					
Tuen Mun	949.76 (22.5)	1588.55 (31.4)	1734.21 (34.1)	1202.72 (28.0)	359.74 (10.8)
Shatin	1226.93 (29.0)	1241.03 (24.5)	1072.24 (21.1)	811.36 (18.9)	616.36 (18.6)
Kwai Chung/ Tsing Yi	917.93 (21.7)	1010.16 (20.0)	867.15 (17.0)	845.56 (19.7)	689.84 (20.8)
Tsuen Wan	210.24 (5.0)	308.04 (6.1)	384.49 (7.7)	325.58 (7.6)	386.78 (11.7)
Yuen Long	284.13 (6.7)	194.90 (3.9)	148.56 (2.9)	293.67 (6.8)	333.42 (10.0)
Tai Po	609.21 (14.4)	658.13 (13.0)	831.45 (16.3)	780.32 (18.2)	925.05 (27.9)
Fanling	31.64 (0.7)	57.54 (1.1)	47.30 (0.9)	32.20 (0.8)	8.80 (0.3)
Total	4229.84	5058.35	5090.40	4291.41	3319.99

Notes:

1. Figures shown are Hong Kong dollars in million.
2. Figures inside bracket are percentage of the total expenditure in that particular year for all the new towns consideration.

Source: Compiled from Government Development Programme,  
1986



TABLE 6  
COST OF SITE MIXES

=====		
Cost of Production:		
Cement @ \$420/ton	140.70	
Aggregates @ \$65/ton	117.00	
Additives	<u>3.50</u>	
		261.20
Variable Overhead:		
Power and Misc Utilities		<u>5.00</u>
	Total Variable Cost = 266.20	

Fixed Overhead:

Erection of Plant	@	\$100,000
Depreciation	@	\$3,000 per month
Site Establishment	@	\$150,000 per month

For a typical 18-month contract,

Total fixed charges = \$424,000

Cost of Site Mixes @ a total production of

10,000 cu m	=	\$308.6
20,000 cu m	=	\$287.4
30,000 cu m	=	\$280.3

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Note:

1. Cost of Materials are based on prevailing market rates applicable for an average contractor. Trade and quantity discounts are not considered.
2. Typical fixed charges are provided by Ready Mixed Concrete.

Sources: Shui On Marketing Dept

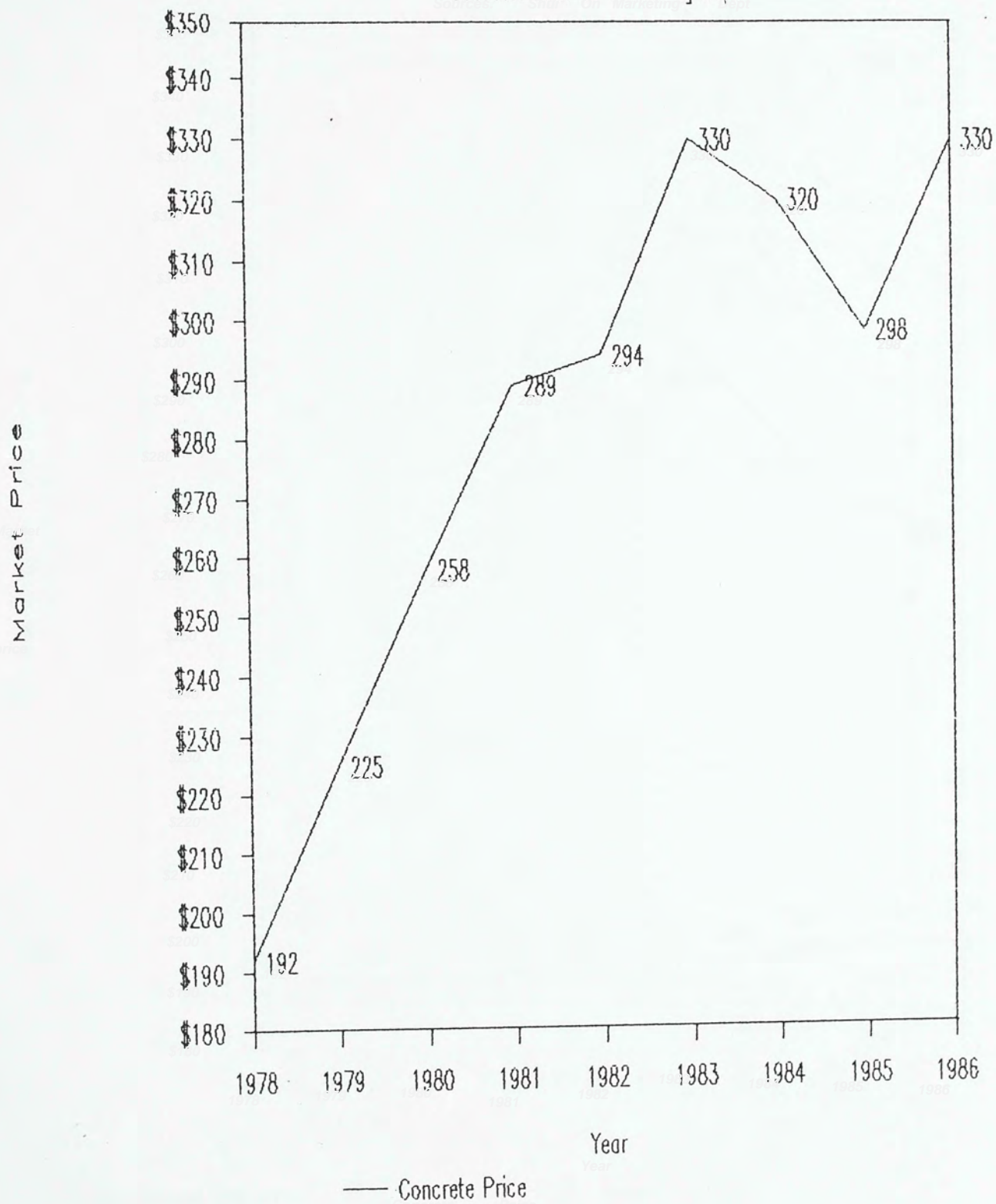




Figure 2 - Cement and Quarry Production

Sources: Census and Statistics Dept

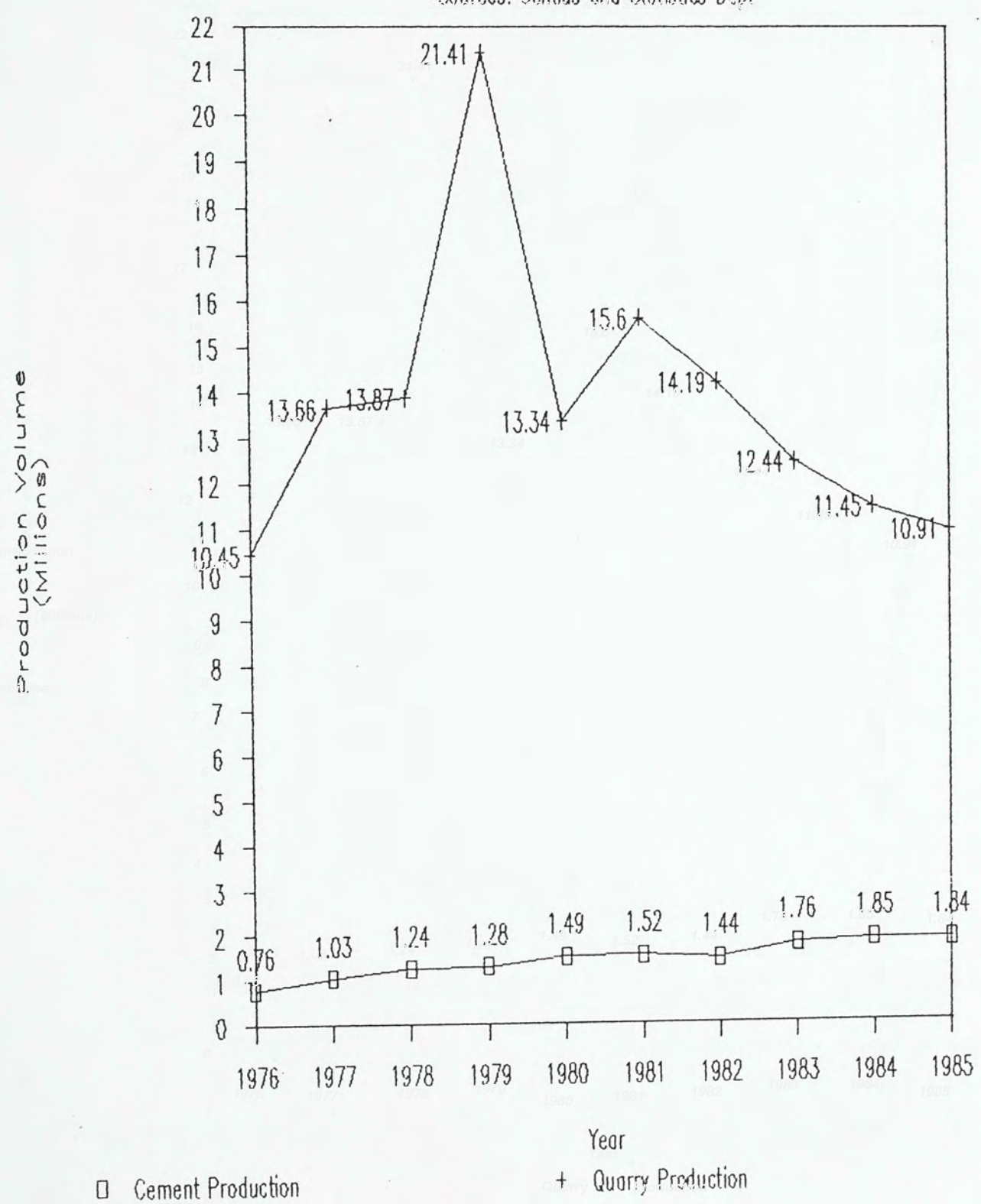
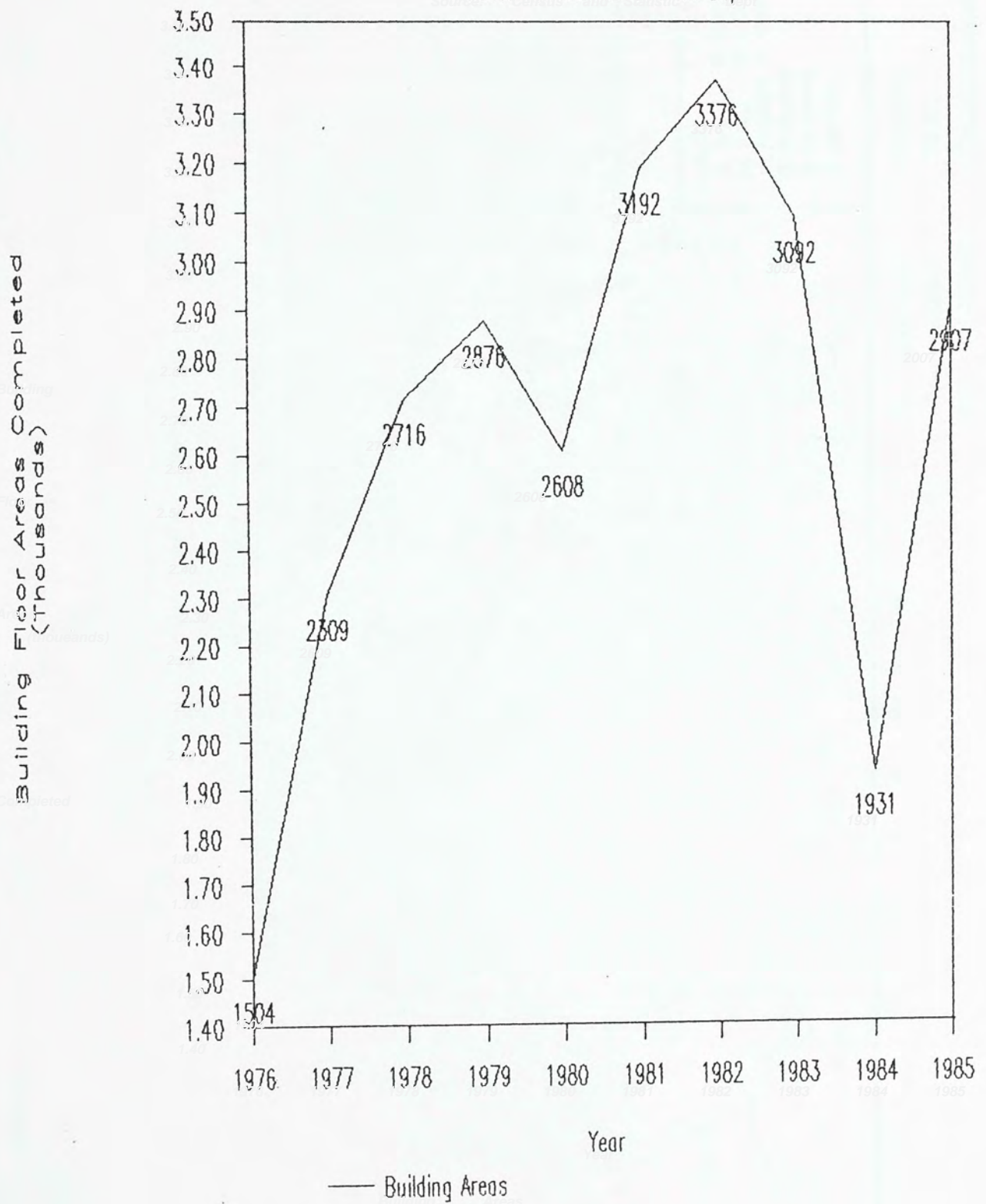


Figure 3 – Concrete Demand Trend

Source: Census and Statistic Dept







APPENDIX

LETTER AND QUESTIONNAIRE  
TO CIVIL CONTRACTORS





THE CHINESE UNIVERSITY OF HONG KONG 香港中文大學

SHATIN · NT · HONG KONG · TEL. 0-6352111 · TELEGRAM · SINOVERSITY · 香港新界沙田 · 電話：〇 · 六 · 三 · 五 · 二 · 一 · 一  
TELEX · 50301 CUNK HK

工商管理學院碩士課程部  
MBA Division  
Faculty of Business Administration

TEL. 0-6352783

學生專題研究用箋  
Student Research Projects

March 16, 1987

Dear Sirs,

Research of Ready Mixed  
Concrete Suppliers

I am working on a research project about the marketing strategies of the local ready mixed concrete suppliers as a student at the Chinese University's three-year part time MBA programme.

As an established contracting firm, you would have no doubt come across the use of ready mixes. Your view about the suppliers and their product will be most valuable in my research.

The marketing strategies of these suppliers will likely influence the product quality, price and services attached to the sales which I am sure you will be interested in. If you wish, I shall make available to you a summary of my research project when it is complete.

I would be grateful if you would complete the attached questionnaire and returned to me by the self-addressed envelopes.

Thank you for your contribution.

Yours faithfully,

Andrew M Chan

## QUESTIONNAIRE

There are nine major suppliers of ready mixes:

(A)nderson Asia; (G)lorious; (K)en On; Ready (M)ixed Concrete, (P)ioneer; (Q)uon Hing; (R)edland, Wai (S)iu and K (W)ah/CML.

1. Please rank them ALL in terms of their product's quality. Use letter inside the bracket to represent the suppliers.

\_\_\_\_\_

(Best)

\_\_\_\_\_

(Poorest)

2. Which suppliers have you used ?

\_\_\_\_\_

If no, skip Question 3

3. Rate the suppliers you have used in a 10-point scale. 10 points for the best. (eg. use K-8 to represent 8 points for Ken On)

- |  |       |
|--|-------|
| i. Prompt Delivery                                   | _____ |
| ii. Accurate Batching Quantity                       | _____ |
| iii. Co-operation of Truck Drivers                   | _____ |
| iv. Cleanliness of Trucks                            | _____ |
| v. Flexibility in Meeting Contractor's Work Schedule | _____ |
| vi. Ability to Resolve Technical Problems            | _____ |
| vii. Overall Rating                                  | _____ |



Questionnaire  
Page 2

4. Would you use ready mixes when

	Most Likely	Likely	Unsure	No
quality requirements are high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
price is below site mixes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
price is compatible with site mixes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
price is above site mixes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RE or client indicates his preference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sub-contractor indicates his preference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
quantity requirement is below 500 cu m	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
between 500 and 3000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
between 3000 and 6000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
between 6000 and 9000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
above 9000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
duration of contract is less than 6 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
bet 6 and 12 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
bet 12 and 24 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
above 24 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
location of work is remote	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
liquidated damages of contract is high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
working in a building project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
working in a civil project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
your workload on hand is high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
site working area is limited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Questionnaire  
Page 3

	Most Likely	Likely	Unsure	No
5. Will you consider the supplier's services in				
formwork and falsework design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
carrying out concreting work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
carrying out other related works such as steel fixing and erection of formwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
supplying material related to concreting such as curing compounds, form ties, steel spacers, form oils, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Will you using ready mixes more frequently given the above additional services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

----- End -----



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